APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,135	08/08/2001	B. Arlen Young	ADPT1052	5885

7590 01/27/2005	EXAMINER
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2162	

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DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 August 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   This office action is in response to the amendment filed on August 16, 2004, in

which claims 1-20 are presented for further examination.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-20 have been considered but are

moot in view of the new ground(s) of rejection necessitated by amendment.

Claim Objections

3.   Claims 14-15,and 18 are objected to because of the following informalities:

claim 14, line 12, after "address", please delete "and";

claim 15, line 11, after "end-of-list flag", please delete "and"; and

claim 18, line 11, after "address", please delete "and". Appropriate correction is

required.

Claim Rejections - 35 U.S.C. ' 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition
> of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions
> and requirements of this title.

5.   Claims 14 and 15 are rejected 35 U.S.C. 101 because they are directed to non-

statutory subject matter, specifically, as directed to an abstract idea.

Claims 14 and 15 define non-statutory processes because it merely manipulates an

abstract idea without a claimed limitation to a practical application. Data structure not

claimed as embodied in computer-readable media is descriptive material per SE and is

not statutory because they are neither physical nor statutory processes. Structural and

functional interrelationship with a general-purpose computer for permitting claimed

functions to be realized are not provided in the claims. In contrast, a claimed system

should define structural and functional interrelationships between data structures or

functional parts and a computer system which permit the data functions to be realized,

and is statutory. Thus, the claimed are rejected as being non-statutory. Additionally, the

invention, as claimed, is directed to the manipulation of an abstract idea with no practical

application in the technology arts. The claims set forth a structure. The language of the

claim does not transform the claimed subject matter into statutory subject matter. Clearly,

the recital is merely a field of use or desired end of use limitation. Data that are merely

stored or contained in a memory (or database) are simply functional descriptive material

without being executed by a general-purpose computer. Thus, the claim is lack a practical

application in the technological arts. Applicant is advised to amend the claim by

specifying the claim being directed to a practical application and being executed by a

general purpose computer in order to correct the above indicated deficiencies.

Claim Rejections - 35 USC § 112

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7.   Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. Claim 1 recites in line 4, "a plurality of

scatter/gather list section, stored in a memory, comprising a scatter/gather list, wherein at

least one scatter/gather list section in said plurality". It is unclear as whether the structure

is stored in the memory or the structure comprising a scatter/gather list, or whether the

plurality of scatter/gather is stored in the memory and the memory comprising a

scatter/gather list. Such language in the claim is vague, confused and indefinite.

Furthermore, the recited "wherein at least one scatter/gather list sections in said plurality"

is also unclear as to what **said plurality** the applicant is referring to. For the purpose of

examination the examiner has considered "a plurality of scatter/gather list sections,

stored in a memory, comprising a scatter/gather list" to *—a plurality of scatter/gather list*

sections stored in a memory, wherein said scatter/gather sections include a

scatter/gather list--.

Claim 14 recites "a plurality of scatter/gather list sections comprising a

scatter/gather list, wherein at least one scatter/gather list section in said plurality". It is

unclear as to what **said plurality** the applicant is referring to. For the purpose of

examination the examiner has considered "a plurality of scatter/gather list sections

comprising a scatter/gather list" to *—a plurality of scatter/gather list sections, wherein*

said scatter/gather sections include a scatter/gather list--.

Claim 15 recites "a plurality of scatter/gather list sections comprising a

scatter/gather list, wherein at least one scatter/gather list section in said plurality". It is

unclear as to what **said plurality** the applicant is referring to. For the purpose of

examination the examiner has considered "a plurality of scatter/gather list sections

comprising a scatter/gather list" to *—a plurality of scatter/gather list sections, wherein*

said scatter/gather sections include a scatter/gather list--.

Claim 16 recites "a plurality of scatter/gather list sections comprising a scatter/gather list, wherein at least one scatter/gather list section in said plurality". It is unclear as to what **said plurality** the applicant is referring to. For the purpose of examination the examiner has considered "a plurality of scatter/gather list sections comprising a scatter/gather list" to *—a plurality of scatter/gather list sections, wherein said scatter/gather sections include a scatter/gather list—*.

Claim 18 recites "a memory comprising scatter/gather list sections comprising a scatter/gather list, wherein at least one scatter/gather list section in said plurality". It is unclear as to what **said plurality** the applicant is referring to. For the purpose of examination the examiner has considered "a memory comprising a scatter/gather list sections comprising a scatter/gather list" to *—a memory for storing a plurality of scatter/gather list sections, wherein said scatter/gather sections include a scatter/gather list—*.

Applicant is advised to amend the claims by providing a clear and concise claimed language to enable one having ordinary skill in the art to understand and to make and use the claim invention.

Claim Rejections - 35 USC § 102

8.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9.   Claims 1-13, 16-17 and 19-21 as best understood are rejected under 35

U.S.C. 102(b) as being anticipated by Applicant's admitted prior art Specification pages

1-3 and (fig. 1A-1C).

As to claim 1, Applicant's admitted prior art (Specification pages 1-3 and fig. 1A-1C)

discloses the claimed " a plurality of scatter/gather list sections stored in a memory" a

scatter/gather list stored in memory 115 (fig.1A-1B) includes a plurality of sections 130A

and 130B, "wherein at least one scatter/gather list section" the scatter/gather list sections

130A and 130B, comprising: "a plurality of data elements" the data elements 130_1A to

130_nA in list 130A and the data elements 130_1B to 130_nB in list 130B (fig.1A-1B),

wherein each data element 130_1A to 130_nA in list 130A, and wherein the plurality of

scatter/gather list 130A to 130B has a structure as illustrated by list section 130C in

fig.1C, and wherein list section 130C includes a plurality of elements 140_1 to

140_(n+1), each of elements 140_1 to 140_(n+1) includes an end-of-section flag a1 and

an end-of –list flag y1 (see fig.1C).

As to claim 2, Applicant's admitted prior art discloses the claimed "said end-of-list flag

has a same value in said each data element" wherein end-of –list flag y1 has the same

format or value in the data element 140_1 to 140_(n+1) (see fig.1C).

As to claim 3, Applicant's admitted prior art discloses the claimed "wherein said

end-of-section flag has a same value in said each data element" wherein the end-of-

section flag a1 has the same format or value in the data element 140_1 to 140_(n+1) (see

fig.1C).

As to claim 4, Applicant's admitted prior art discloses the claimed "wherein said end-of-section flag has a first value in a last data element in said plurality of data elements, and a second value in all other data elements in said plurality of data elements" wherein the end-of section flag a1 in link elements 140_n is set by driver 220 to a. first stage, if only if the data element 140_n is the last data element in the scatter/gather list 130C (see fig.1C).

As to claim 5, Applicant's admitted prior art discloses the claimed "wherein said end-of-list flag has a same value in said each data element." wherein the end-of section flag y1 in link elements 140_n is set by driver 220 to a. first stage, if only if the data element 140_n is the last data element in the scatter/gather list 130C (see fig.1C).

As to claim 6, Applicant's admitted prior art discloses the claimed "wherein said end-of-list flag has a first value in said last data element in said plurality of data elements, and a second value in all other data elements in said plurality of data elements" wherein the end-of section flag a1 in link elements 140_n is set by driver 220 to a. first stage, if only if the data element 140_n is the last data element in the scatter/gather list 130C (see fig.1C).

As to claim 7, Applicant's admitted prior art discloses the claimed "said end-of-list flag has a size of one bit" as a single enlist flag bit (page 2, line 32).

As to claim 8, Applicant's admitted prior art discloses the claimed "wherein said

end-of-section flag has a size of one bit" the end list flag bit has a value of one (page 3,

line 1).

As to claim 9, Applicant's admitted prior art discloses the claimed "wherein said each

data element further comprises an address field" wherein the data element 130_1A

specifies segments 116 has an address x1 (specification page 2, line 11).

As to claim 10, Applicant's admitted prior art discloses the claimed "wherein said

end-of-list flag, and said end-of-section flag are included within said address field"

end-of-list flag (a1), and said end-of-section flag (y1)(fig.1C).

As to claim 11, Applicant's admitted prior art discloses the claimed "wherein said each

data element further comprises a length field" wherein the data element 130_1A specifies

segments 116 has an length y1 (specification page 2, line 11).

As to claim 12, Applicant's admitted prior art discloses the claimed "wherein said each

data element further comprises: a length field" wherein the data element 130_1A

specifies segments 116 has an length y1 (specification page 2, line 11).

As to claim 13, Applicant's admitted prior art discloses the claimed "an end-of-list flag" (col.); and "an end-of-section flag" wherein list section 130C includes a plurality of elements 140_1 to 140_(n+1), each of elements 140_1 to 140_(n+1) includes an end-of-section flag a1 and an end-of –list flag y1 (see fig.1C).

As to claim 16, Applicant's admitted prior art (Specification pages 1-3 and fig. 1A-1C) discloses the claimed " a plurality of scatter/gather list sections stored in a memory" a scatter/gather list stored in memory 115 (fig.1A-1B) includes a plurality of sections 130A and 130B, "wherein at least one scatter/gather list section" the scatter/gather list sections 130A and 130B, comprising: "a plurality of data elements" the data elements 130_1A to 130_nA in list 130A and the data elements 130_1B to 130_nB in list 130B (fig.1A-1B), wherein each data element 130_1A to 130_nA in list 130A, and wherein the plurality of scatter/gather list 130A to 130B has a structure as illustrated by list section 130C in fig.1C, and wherein list section 130C includes a plurality of elements 140_1 to 140_(n+1), each of elements 140_1 to 140_(n+1) includes an end-of-section flag a1 and an end-of –list flag y1 (see fig.1C).

As to claim 17, Applicant's admitted prior art (Specification pages 1-3 and fig. 1A-1C) discloses a link element (n+1), wherein each element (wherein each data element 130_1A to 130_nA in list 130A) comprises address (x1); wherein list section 130C includes a plurality of elements 140_1 to 140_(n+1), each of elements 140_1 to 140_(n+1) includes an end-of-section flag a1 and an end-of -list flag y1 (see fig.1C).

As to claim 19, Applicant's admitted prior art (Specification pages 1-3 and fig. 1A-1C)

discloses the claimed " a plurality of scatter/gather list sections stored in a memory" a

scatter/gather list stored in memory 115 (fig.1A-1B) includes a plurality of sections 130A

and 130B, "wherein each section includes a plurality of elements" the scatter/gather list

sections 130A and 130B, comprises the data elements 130_1A to 130_nA in list 130A

and the data elements 130_1B to 130_nB in list 130B (fig.1A-1B); wherein each element

(wherein each data element 130_1A to 130_nA in list 130A) comprises address (x1);

wherein list section 130C includes a plurality of elements 140_1 to 140_(n+1), each of

elements 140_1 to 140_(n+1) includes an end-of-section flag a1 and an end-of -list flag

y1 (see fig.1C); setting an end-of-list flag in a last data element of a last section in said

plurality of sections"; and "setting an end-of-section flag in at least one of said plurality

of sections other than said last section" wherein the end-of section flag a1 in link

elements 140_n is set by driver 220 to a. first stage, if only if the data element 140_n is

the last data element in the scatter/gather list 130C (see fig.1C).

As to claim 20, Applicant's admitted prior art discloses the claimed " wherein said

setting an end-of-section flag is performed on a last data element in said at least one of

said plurality of sections other than said last section" wherein the end-of section flag a1

in link elements 140_n is set by driver 220 to a. first stage, if only if the data element

140_n is the last data element in the scatter/gather list 130C (see fig.1C).

As to claim 21, Applicant's admitted prior art discloses the claimed "wherein said setting

an end-of-section flag is performed on a link element in said at least one of said plurality

of sections other than said last section" wherein the end-of section flag a1 in link

elements 140_n is set by driver 220 to a. first stage, if only if the data element 140_n is

the last data element in the scatter/gather list 130C (see fig.1C).

Allowable Subject Matter

10.   **Claims 14, 15 and 18 would be allowable if rewritten or amended to**

overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph and the rejection

under 35 U.S.C. 101, set forth in this Office action.

Reasons for Indicating Allowable Subject Matter

11.   **The following would be the reasons for allowance, if the claims overcome the**

rejection(s) under 35 U.S.C. 112, 2nd paragraph and the rejection under 35 U.S.C.

101, set forth in this Office action: Upon searching a variety of databases, the examiner

respectfully submits that "an address field having a data segment address and length field

having a data segment length and an address field having a next list section address" (see

applicant's fig.2B and 2C items 234 and 235) in conjunction with all other limitations of

the dependent and independent claims, are not taught nor suggested by the prior art of

record (PTO-1449 and 892,). Therefore, the pending claims 14-15 and 18 are hereby

allowed.

Conclusion

12.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than

SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jean M Corrielus whose telephone number is (571) 272-

4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Breene can be reached on (703) 305-4393. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Jean M Corrielus
Primary Examiner
Art Unit 2162

January 14, 2005